

CLAIMS

1. A reciprocating saw, comprising:
 - a housing [13];
 - a plunger [15] in said housing [13] for mounting a saw blade [1];
 - a driving gear [7] connecting with a driving mechanism;
 - a first eccentric shaft [5] and a second eccentric shaft [8] which all disposed on said driving gear [7];
 - a link shaft [4] which rear end portion connecting with said first eccentric shaft [5];
 - a pushing member [9] which rear end portion rotatably connecting with said second eccentric shaft [8],
 - a lifting member [11];
 - a front end portion of said link shaft [4] rotatably connecting with a rear end portion of said plunger [15], said lifting member [11] pivotally connecting with said housing [13];characterized in that:
 - said lifting member [11] contacting with a front end portion of said pushing member [9] and also contacting with a sleeve bearing [12] which disposed on a rear end portion of said plunger [15], a angle formed between lines through a axle center of a first eccentric shaft [5], a axle center of said driving gear [7] and a axle center of a second eccentric shaft [8] is an obtuse angle, said lines lies in a plane which perpendicular to said first eccentric shaft [5].
2. A reciprocating saw of claim 1, wherein a front end portion of said pushing member [9] is against upon a lower rear portion of said lifting member [11], a upper front end portion of said lifting member [11] is against upon said sleeve bearing [12].
3. A reciprocating saw of claim 1, wherein a spring [2] providing between said housing [13] and said sleeve bearing [12].
4. A reciprocating saw of claim 1, wherein said first eccentric shaft [5] and said second eccentric shaft [8] respectively provided on the top surface and the bottom surface of said driving gear [7].